



# UNITED STATES PATENT AND TRADEMARK OFFICE

A

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/738,376	12/17/2003	Kerry Dennis Brown	MLF 670-01	7267
26329	7590	12/29/2005	EXAMINER	
RICHARD B. MAIN PATENT ATTORNEY P.O. BOX AT LOS ALTOS, CA 94022			FUREMAN, JARED	
			ART UNIT	PAPER NUMBER
			2876	

DATE MAILED: 12/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/738,376	<b>Applicant(s)</b> BROWN, KERRY DENNIS	
	<b>Examiner</b> Jared J. Fureman	<b>Art Unit</b> 2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-13 is/are allowed.
- 6) ☒ Claim(s) 1,2,4,6 and 8 is/are rejected.
- 7) ☒ Claim(s) 3,5 and 7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Receipt is acknowledged of the amendment filed on 9/21/2005, which has been entered in the file. Claims 1-13 are pending.

### ***Claim Objections***

1. Claims 1, 3, 4, 5, 6, 12 and 13 are objected to because of the following informalities:

Claim 1:

Line 4, "its" should be replaced with --a--, in order to avoid any appearance of a lack of proper antecedent basis for "its length".

Line 16: "said" should be replaced with --a--, in order to avoid a lack of proper antecedent basis for "said read head".

Claim 3:

Line 12: "number" should be replaced with --access code--, in order to correspond with "financial account access code" as recited in line 8.

Lines 13 and 14: --financial account access-- should be inserted before "code", in order to correspond with "financial account access code" as recited in line 8.

Art Unit: 2876

Claim 4, line 5: "the magnetic write heads" lacks proper antecedent basis, note that claim 1 recites "at least one magnetic write head", but does not positively recited a plurality of magnetic write heads.

Claim 5, line 6: "one" should be replaced with --magnetic recording--, in order to clarify the claim.

Claim 6:

Line 9: "the" (first occurrence) should be replaced with --a--, in order to avoid a lack of proper antecedent basis for "the reverse surface".

Line 10, "confirming" should be replaced with --conforming--, in order to correct a typographical error.

Claim 12, line 4: --said magnetic stripe-- should be inserted after "beneath", in order to clarify the claim.

Claim 13, line 14: --be-- should be inserted before "made", in order to clarify the claim.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Hoss (US 5,412,192).

Hoss teaches a magnetic data storage array, comprising: a stripe (34) of a magnetic material having uniform width and depth along a longitudinal length, and a front side and a back side, and able to store electronic data as a magnetic recording comprising a plurality of bits; at least one magnetic write head (transducer 30, including core 45 and coil 47, see figures 1, 3c and 3d) permanently positioned on said back side of the magnetic stripe at a particular data bit location of one of said plurality of bits (see figures 1, 2, 3b and 3d), and providing for electronic-magnetic alteration of a data bit so as to be magnetically readable on said front side; wherein, said front side of the stripe of magnetic material provides a continuous, homogeneous, and uninterrupted surface (see figures 3c and 3d) for a read head (not shown) to shuttle along; wherein the magnetic write head further comprises an independently addressable coil (coil 47) with an electromagnetic field coupling to a magnetic core (core 45) with a field gap (see figure 3c, showing a gap in core 45) all embedded in a supporting carrier (card 12, see figure

Art Unit: 2876

3d) adjacently beneath the stripe of magnetic material (also see figures 1-3d, column 1, lines 63-66; column 3, lines 18-33 and 48-53; column 4, lines 3-9).

3. Claim 8 is rejected under 35 U.S.C. 102(b) as being anticipated by Cooper (US 6,308,890 B1, previously cited).

Cooper teaches a magnetic data storage array, comprising: a stripe of magnetic material (programmable magnetic strip 4 or 10, see figures 2 and 3) having a longitudinal length (see figure 2), and a front side and a back side (see figure 2), and able to store electronic data as a magnetic recording comprising a plurality of bits (see figure 2); an array of magnetic-transducer write heads (electromagnetic coils, see figure 4 and column 7 lines 8-42) permanently positioned on said back side of the stripe at a particular data bit of one of said plurality of bits (see figure 4), and providing for electronic-magnetic alteration of a data bit magnetically readable on said front side; and a magnetic recording (the programmable magnetic strip 10, including material 20, stores a magnetic recording, such as account data) serially accessible to a longitudinally moving read head on said front side of the stripe that only includes said data bits affected by array of magnetic-transducer write heads; (also see figures 2-4, column 2 line 48 - column 3 line 51, column 3 line 63 - column 4 line 3, column 4 line 30 - column 5 line 7, column 5 lines 25-46, column 6 line 30 - column 7 line 42).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoss in view of Lane (US 5,623,552, previously cited).

The teachings of Hoss have been discussed above.

Hoss fails to specifically teach a controller connected to the magnetic write head and provided for de-magnetization of said data bit a preset amount of time after being programmed so as to counteract persistent bit magnetization in a coercive media.

Lane teaches a controller (106) connected to a magnetic write head (magnetic stripe programmer 110) and provided for de-magnetization of said data bits (data bits in magnetic stripe 109) a preset amount of time after being programmed so as to counteract persistent bit magnetization in a coercive media (see figures 2, 14, column 5, lines 6-8, 47-48; column 5, line 62 - column 6, line 12; and column 9, lines 13-16).

In view of Lane's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the magnetic data storage array as taught by Hoss, a controller connected to the magnetic write head and provided for de-magnetization of said data bit a preset amount of time after being programmed so as to counteract persistent bit magnetization in a coercive media; in order to prevent unauthorized use of the magnetic data (see column 6, lines 7-12, of Lane).

6. Claims 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kelsey (US 5,907,142).

Kelsey teaches a payment card (12), comprising: a plastic card configured for use in a conventional merchant point-of-sale magnetic-stripe card reader (see column 2, line 65 - column 3, line 1); a magnetic stripe (32) disposed on a reverse surface of the plastic card and conforming to industry-compatible configurations, formats and encodings to make magnetic recordings accessible to a plurality of said card readers (see column 2, line 65 - column 3, line 1) and writeable by a card programmer (not shown, but necessarily present in order to initially program magnetic stripe 32); a magnetic transducer write head (transducer 36, including core 38 and coil 40, see figures 4A and 4B) embedded beneath the magnetic stripe (see figures 1, 4A and 4B); and a flat uniform exposed surface on the magnetic stripe uninterrupted by wires or gaps and providing for a magnetic recording serially accessible to a longitudinally moving read head in which the magnetic recording includes some data bits that can be programmed and demagnetized by the magnetic-transducer write head (also see figures 1, 4A, 4B, column 2, line 65 - column 3, line 1; column 3, line 64 - column 4, line 5; column 4, lines 40-57; and column 6, lines 32-63).

Kelsey fails to specifically teach an array of magnetic write heads.

However, providing an array of magnetic write heads, as opposed to a single magnetic write head represents a duplication of elements (the magnetic write heads).



Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the payment card as taught by Kelsey, an array of magnetic write heads; in order to increase the number of magnetic data bits which are capable of being programmed, thereby increasing the capabilities of the card to write different magnetic data to the magnetic stripe.

***Allowable Subject Matter***

7. Claims 9-13 have been allowed over the prior art of record. Note that claims 12 and 13 require the correction of the claim objections noted above.

8. Claims 3, 5 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Note that claims 3 and 5 require the correction of the claim objections noted above.

9. The following is an examiner's statement of reasons for allowance and the indication of allowable subject matter: The prior art of record, taken alone or in combination, fails to teach or fairly suggest (re claim 3) a controller connected to the magnetic write heads and providing for obfuscation of the financial account access code by automatic re-programming of the magnetic recording to disallow a second use of the same financial account access code and to complicate a correct guess of a proper next financial account access code; (re claim 5) a detector connected to signal the controller when a reading of data in the magnetic recording has occurred and thereby trigger removing at least parts of the present magnetic recording and the encoding and

programming of a next magnetic recording; (re claim 7) a controller connected to the array of magnetic transducer write heads and providing for an incrementing of a usage-counter record subsequent to each use; (re claim 9) detecting each magnetic reading from above and shuttling along of said magnetic stripe by an external magnetic reader; (re claim 12) means to generate and write a progressing code number to said magnetic stripe from beneath said magnetic stripe and completely within said plastic user payment card without the support of an external reader or writer; (re claim 13) a use detector disposed within the plastic carrier for sensing when a card reader has been used to read said coded string of bits to trigger the data generator to produce a next coded string of bits; in combination with the other claimed limitations as set forth in the claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Response to Arguments***

10. Applicant's arguments filed 9/21/2005, regarding claim 8 (see pages 10-14 of the amendment filed on 9/21/2005), have been fully considered but they are not persuasive. Cooper teaches the magnetic transducer write heads surrounding the stripe of magnetic material, thus including the back side of the stripe (see figure 4, of Cooper). It is noted that claim 8 does not require that the magnetic transducer write heads are entirely

positioned on the back side of the stripe, or that the stripe provides a continuous and uninterrupted surface.

11. Applicant's argument, see pages 15-16, filed 9/21/2005, with respect to the Walter reference have been fully considered and are persuasive. The 102(b) rejection of claim 12 has been withdrawn.

12. Applicant's other arguments with respect to claims 1, 2, 4 and 6 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

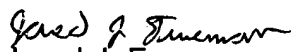
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 2876

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jared J. Fureman whose telephone number is (571) 272-2391. The examiner can normally be reached on 7:00 am - 4:30 PM M-T, and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Jared J. Fureman  
Primary Examiner  
Art Unit 2876

December 23, 2005